

1/9

11 5' CTG CGT CAG GTC CGG GCT CCT GGA CTT CGC CTT TCC CGA GCC CTG GAG GTG GGG 56  
 20 47  
 65 AGA AAA GGT TCA CCA ATT TTT AAA ATC CAA ATA TAT CTC ATG GTA CAG TGG AAG 110  
 74 92  
 119 AAC TGG CCA GAG AGT CTG GAA GTT TGG GTT CTG GTC CTG GCT GTG CCA CTG ACT 164  
 128 137 146 155  
 173 CAC TGT GAC CTT GGG ATC TTG TGC TGT GAA GAC ATT TCC CAA GTG CTT CAT GTT 218  
 182 191 200 209  
 227 AGC CAG CAA ATC TGA CCC ACA AGG CCT GGA AAG AGG TGA TTG TTA GGT TGC GCA 272  
 236 245 254 263  
 281 GAG GTG GTC TTA TCC AGC TCA GCT TCC CCT GGG ACC CAC CGT GGG ACC TGA GGC 326  
 290 308 317  
 335 AGA ACT GGG GTG GAC TTG GCC TCC TCC ATG GCA CAC CGG CTG CAG ATA CGA CTG 380  
 344 353 362 371  
 M A H R L Q I R L

FIGURE 1A

389 CTG ACG TGG GAT GTG AAG GAC ACG CTG CTC AGG CTC 416 425 434  
L T W D V K D T L L R L R H P L G E GAG  
443 GCC TAT GCC ACC AAG GCC CGG GCC CAT GGG CTG GAG GTG GAG CCC TCA GCC CTG 488  
A Y A T K A R A H G L E V E P S A L  
497 GAA CAA GGC TTC AGG CAG GCA TAC AGG GCT CAG AGC CAC AGC TTC CCC AAC TAC 542  
E Q G F R Q A Y R A Q S H S F P N Y  
551 GGC CTG AGC CAC GGC CTA ACC TCC CGC CAG TGG TGG CTG GAT GTG GTC CTG CAG 596  
G L S H G L T S R Q W W L D V V L Q  
605 ACC TTC CAC CTG GCG GGT GTC CAG GAT GCT CAG GCT GTA GCC CCC ATC GCT GAA 650  
T F H L A G V Q D A Q A V A P I A E  
659 CAG CTT TAT AAA GAC TTC AGC CAC CCC TGC ACC TGG CAG GTG GTG GAT GGG GCT 704  
Q L Y K D F S H P C T W Q V L D G A  
713 GAG GAC ACC CTG AGG GAG TGC CGC ACA CGG GGT CTG AGA CTG GCA GTG ATC TCC 758  
E D T L R E C R T R G L R L A V I S

FIGURE 1B

[illegible]

FIGURE 1C

1145	1154	1163	1172	1181	1190
AGG CCA TGG AGA AAA CCT TAA ACA AAC CCT GGA GAC AGG GAG CCC CTT CTT TCT					
1199	1208	1217	1226	1235	1244
CCA CAG CTC TGG ACC TTT CCC CCT CTC CCT GCG GCC TTT GTC ACC TAC TGT GAT					
1253	1262	1271	1280	1289	
AAT AAA GCA GTG AGT GCT GAG CTC TCA CCC TTC CCC CAC TAA AAA AAA AA 3'					

FIGURE 1D

10 5' CCA CGC GTC CGG TTC CGT TCA ACG AAG TGG TTG CTT TTT TTA GTT CCG GCA ATG 55  
 19 28 37 46 M  
 64 73 82 91 100 109  
 AGT TGC GCC GGG GCG GCG GGT CCC CGC CTT TGG CGG CTG CGC CCA GGG GCC  
 S C A G A A A A P R L R P G A  
 118 127 136 145 154 163  
 CGG CGG TCC CTC TCA GCT TAT GGA AGA AGA ACC AGT GTC AGA TTT CGC AGT TCA  
 R R S L S A Y G R R T S V R F R S S  
 172 181 190 199 208 217  
 GGA ATG ACT TTA GAC AAT ATC AGT CGG GCA GCT GTG GAT CGA ATA ATC CGG GTG  
 G M T L D N I S R A A V D R I I R V  
 226 235 244 253 262 271  
 GAT CAT GCA GGC GAA TAT GGA GCA AAC CGC ATC TAT GCC GGG CAG ATG GCT GTC  
 D H A G E Y G A N R I Y A G Q M A V  
 280 289 298 307 316 325  
 CTG GGT CGG ACC AGC GTC GGG CCA GTC ATT CAG AAA ATG TGG GAT CAA GAA AAG  
 L G R T S V G P V I Q K M W D Q E K  
 334 343 352 361 370 379  
 GAC CAT TTG AAA AAG TTC AAT GAG TTG ATG GTT ATG TTC AGG GTC CGG CCA ACA  
 D H L K K F N E L M V M F R V R P T

FIGURE 2A

338 GTT CTG ATG CCC TTG TGG AAC GTG CTG GGG TTT GCA CTG GGG GCG ACC GCC 433  
 V L M P L L W N V L G F A L G A G T A  
 442 TTT CTC GGG AAG GAA GGT GCC ATG GCC TGC ACC GTG GCG GTG GAA GAG AGC ATA 487  
 L L G K E G A M A C T V A V E E S I  
 496 GCA CAT CAC TAC AAC AAC CAG ATC AGG ACG CTG ATG GAG GAG CCT GAA AAA 541  
 A H Y N N Q I R T L M E E D P E K  
 550 TAC GAG GAA CTT CTT CAG CTG ATA AAG AAA TTT CGG GAT GAA GAG CTT GAG CAC 595  
 Y E L L L Q CAG CTG ATA AAG AAA TTT CGG GAT GAA GAG CTT GAG CAC  
 604 CAT GAC ATA GGC CTC GAC CAT GAT GCA GAA TTG GCT CCA GCC TAT GCC GTC CTG 649  
 H D I G L L D H D A E L A P A Y A V L  
 658 AAG AGC ATT ATC CAG GCC GGA TGC AGA GTG GCG ATA TAT TTA TCA GAA AGA TTA 703  
 K S I I Q A G C R V A I Y L S E R L  
 712 TAA AGT GTG TCC AGT TTT GCC TGT CTA TAA AAG ATG ATA GTA ATT TAC CAA GTG 757  
 TAA AGT GTG TCC AGT TTT GCC TGT CTA TAA AAG ATG ATA GTA ATT TAC CAA GTG

FIGURE 2B

766 775 784 793 802 811  
ACA TTT GCA GAG AAG CAG GTG TAC AGT TAT CGT TGT ACT TTT GTA CAA TGT GAA

820 829 838 847 856 865  
TTT TGT TAA TAA ATT ATA AGG TTT GTT TTT TTT TTA AAC TCT GCA GTG TTG

874 883 892 901 910 919  
ATT TTT CTC TGG GTT GTT TTT TCT GCC ATG AGA CCA ACA GGT CAC CAG CCT TGT

928 937  
TCA AGT TAC AGC AAA CGA AGC TGG G 3'

FIGURE 2C

1 M S C A G A A - - - - - A A P R L W R L R P G A R R S L S 2267905  
 1 M S A A G A I - - - - - A A A S V G R L R T G V R R P F S 93415017  
 1 M A H R L Q I R L L T W D V K D T L L R L R H P L G E A Y A 1581473  
 1 M R S L S R F R L I T F D V T N T L L Q F R T T P G K Q Y G 91561732  
  
 25 A Y G R R T S V R F R S S G M T - - - - - L D N I S R A A V D R I 2267905  
 25 E Y G R G L I I R C H S S G M T - - - - - L D N I N R A A V D R I 93415017  
 31 T K A R A H G L E V E P S A L E Q G F R Q A Y R A Q S H S F 1581473  
 31 E I G A L F G A R C D N N E L A K N F K A N W Y K M N R D Y 91561732  
  
 53 I R V D H A G E Y G A N R - - - - - I Y A G Q M A 2267905  
 53 I R V D H A G E Y G A N R - - - - - I Y A G Q M A 93415017  
 61 P N Y G - - L S H G L T S R Q W W L D V V L Q T F H L A G V 1581473  
 61 P N F G R D T N P Q M E W Q Q W W R K L I A G T F A E S G A 91561732  
  
 73 V L G R T S V G P V I Q K M - - - - - W D Q E K D H 2267905  
 73 V L G R T S V G P V I Q K M - - - - - W D Q E K N H 93415017  
 89 Q D A Q A - V A P I A E Q L Y K D F S H P C T W Q V L D G A 1581473  
 91 A I P D E K L H N F S N H L I E L Y K T S I C W Q P C N G S 91561732  
  
 94 L K K F N E - - - - - L M V M F R V R P T 2267905  
 94 L K K F N E - - - - - L M I A F R V R P T 93415017  
 118 E D T L R E C R T R G L R - - - - - L A V I S N F D R R L E 1581473  
 121 V E L L Q Q L R - K E L K P E K C K L G V I A N F D P R L P 91561732

FIGURE 3A



110 V L M P - - - L W N V L G F A L G A G T A L L G K E G A M A 2267905  
110 V L M P - - - L W N V A G F A L G A G T A L L G K E G A M A g3415017  
143 G I L G G L G L R E H F D F V L T S E A A G W P K P D P R I 1581473  
150 T L L Q N T K L D Q Y L D F A I N S Y E V Q A E K P D P Q I g1561732

137 C T V A V E E S I A H H Y N N Q I R T L M E E D P E - K Y - 2267905  
137 C T V A V E E S I A N H Y N N Q I R M L M E E D P E - K Y - g3415017  
173 F Q E A L R - - - L A H M E P V V A A H V G D N Y L C D Y Q 1581473  
180 F Q K A M E K S G L K N L K P E E C L H I G D G P T T D Y L g1561732

165 - - - - - E E L L Q L I K K F R D E E L E H H D I G L D 2267905  
165 - - - - - E E L L Q V I K Q F R D E E L E H H D T G L D g3415017  
200 G P R A V G M H S F L V V G P Q A L D P V V R - - - D S V P 1581473  
210 A A K E L G W H S A L V H E - K S Y A Y L V K K Y G E D I D g1561732

188 H D A E L A P A Y A V L K S I I Q A G C R V A I Y L S E R L 2267905  
188 H D A E L A P A Y A L L K R I I Q A G C S A A I Y L S E R F g3415017  
227 K E H I L P S L A H L L P A L - - - D C L E G S - - T P G L 1581473  
239 R D H V F P S L Y D F H K K - - - - I S D G - - A V V W g1561732

FIGURE 3B